Attachment to Amendment and Reply to Office Action mailed January 29, 2002 Currently Pending Claims

- 1. (Amended) An isolated antibody, or antigen binding fragment thereof, that specifically binds to a 499E9 polypeptide having the amino acid sequence as shown in SEQ ID NO: 2.
- 2. (Amended) The antibody, or antigen binding fragment of claim 1, wherein the antibody is polyclonal.
- 3. (Amended) The antibody, or antigen binding fragment of claim 1, wherein the antibody is monoclonal.
- 6. (Amended) The antibody, or antigen binding fragment of claim 1, wherein the antibody is a 499E9 antagonist.
- 7. (Amended) The antibody, or antigen binding fragment of claim 6, wherein the antigen binding fragment is a F(ab')₂, Fab, or F_v fragment.
- 8. The antibody of claim 1, wherein the antibody binds to a 499E9 polypeptide with a K_d of at least about 30 μ M.
- 9. The antibody of claim 1, wherein the antibody binds to a 499E9 polypeptide with a K_d of at least about 10 μ M.
- 10. (Amended) An isolated antibody, or antigen binding fragment thereof, that specifically binds to a polypeptide selected from the group consisting of:_

- a) a substantially pure or recombinant 499E9 polypeptide exhibiting 100% sequence identity over a length of at least 12 contiguous amino acids to SEQ ID NO: 2;
 - b) a natural sequence 499E9 of SEQ ID NO:2; and
 - c) a fusion protein comprising 499E9 sequence.
- 11. (New) The antibody of claim 1, wherein the antibody binds to a 499E9 polypeptide with a K_d of at least about 3 μ M.
- 12. (New) The antibody, or antigen binding fragment of claim 1, that is conjugated to a detectable label.
- 13. (New) The antibody, or antigen binding fragment of claim 12, wherein the detectable label is an enzyme, a fluorescent label, or radioisotope.
- 14. (New) An isolated antibody, or antigen binding fragment thereof, that binds to a polypeptide of SEQ ID NO:2.
- 15. (New) An isolated antibody, or antigen binding fragment thereof, that specifically binds to a polypeptide selected from the group consisting of:
 - (a) a polypeptide that shares a biological activity with mouse 499E9 and an amino acid sequence identity of at least about 60% with SEQ ID NO:2; and
 - (b) a polypeptide encoded by a nucleic acid sequence that selectively hybridizes with SEQ ID NO:1 under wash conditions of at least 55°C and less than 150 mM salt, wherein said polypeptide shares a biological activity with mouse 499E9.
- 16. (New) The antibody, or antigen binding fragment of claim 15, wherein the antibody is polyclonal.



- 17. (New) The antibody, or antigen binding fragment of claim 15, wherein the antibody is monoclonal.
- 18. (New) The antibody, or antigen binding fragment of claim 15, wherein the antibody is a 499E9 antagonist.
- 19. (New) The antibody, or antigen binding fragment of claim 15, wherein the antigen binding fragment is a F(ab')₂, Fab, or F_v fragment.
- 20. (New) The antibody, or antigen binding fragment of claim 15, wherein the antibody or fragment binds to the polypeptide with a K_d of at least about 30 μ M.
- 21. (New) The antibody, or antigen binding fragment of claim 15, wherein the antibody or fragment binds to the polypeptide with a K_d of at least about 10 μ M.
- 22. (New) The antibody, or antigen binding fragment of claim 15, wherein the antibody or fragment binds to the polypeptide with a K_d of at least about 3 μ M.
- 23. (New) The antibody, or antigen binding fragment of claim 15 that is conjugated to a detectable label.
- 24. (New) The antibody, or antigen binding fragment of claim 23, wherein the detectable label is an enzyme, a fluorescent label, or radioisotope.
- 25. (New) The antibody, or antigen binding fragment of claim 15, wherein the polypeptide shares the amino acid sequence identity of at least about 70% with SEQ ID NO:2.

- 26. (New) The antibody, or antigen binding fragment of claim 15, wherein the polypeptide shares the amino acid sequence identity of at least about 80% with SEQ ID NO:2.
- 27. (New) The antibody, or antigen binding fragment of claim 15, wherein the polypeptide shares the amino acid sequence identity of at least about 90% with SEQ ID NO:2.